

Forum for Linguistic Studies

https://journals.bilpubgroup.com/index.php/fls

ARTICLE

Revisiting Total Physical Response: Evaluating Its Impact on Vocabulary Acquisition and Retention in EFL Classrooms

Ligaa Habeb Al-Obaydi 1, Marcel Pikhart 2* 10

ABSTRACT

This paper analyzes the impact of physical action on foreign language vocabulary acquisition. Total Physical Response (TPR) is a methodology developed half a century ago that was later abandoned, and there is now relatively little research into its potential for foreign language learning. The researchers aimed to revitalize this methodology and test its impact on vocabulary acquisition and retention in foreign language learning. The study was conducted at a secondary school in Iraq with twenty participants aged 14 to 15 years. A physical action game related to vocabulary spelling was integrated into English as Foreign Language (EFL) classes, after which participants were evaluated on vocabulary acquisition and retention. Additionally, a questionnaire was administered to assess their subjective satisfaction with the methodology. The results indicate that this method significantly enhanced vocabulary acquisition and retention among the students, and their subjective satisfaction was notably high. Given the relatively small sample size, this study serves as a pilot study, to be validated on a larger scale in the future. The implications are relevant for curriculum designers as well as the development of psycholinguistic theory. Further research is needed to explore the mechanisms responsible for improved vocabulary acquisition and retention when using this methodology in the context of emerging cognitive science and psychology.

Keywords: Psycholinguistics; Applied Linguistics; TPR; Total Physical Response; Foreign Language Learning; Second Language Acquisition; ESL; EFL; TEFL

*CORRESPONDING AUTHOR:

Marcel Pikhart, Department of Applied Linguistics, Faculty of Informatics and Management, University of Hradec Kralove, 500 03 Hradec Kralove, Czech Republic; Email: marcel.pikhart@uhk.cz

ARTICLE INFO

Received: 10 August 2024 | Revised: 19 August 2024 | Accepted: 6 September 2024 | Published Online: 15 November 2024 DOI: https://doi.org/10.30564/fls.v6i5.7028

CITATION

Al-Obaydi, L.H., Pikhart, M., 2024. Revisiting Total Physical Response: Evaluating Its Impact on Vocabulary Acquisition and Retention in EFL Classrooms. Forum for Linguistic Studies. 6(5): 822–832. DOI: https://doi.org/10.30564/fls.v6i5.7028

COPYRIGHT

Copyright © 2024 by the author(s). Published by Bilingual Publishing Co. This is an open access article under the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License (https://creativecommons.org/licenses/by-nc/4.0/).

 $^{^{1}}$ English Department, College of Education for Human Sciences, University of Diyala, Diyala 32001, Iraq

² Department of Applied Linguistics, Faculty of Informatics and Management, University of Hradec Kralove, 500 03 Hradec Kralove, Czech Republic

1. Introduction

In today's digital age, where students are increasingly spending extended periods in front of screens, revisiting the Total Physical Response (TPR) methodology becomes essential. The growing concern over the impact of excessive screen time on physical and mental well-being underscores the need for incorporating physical activities into learning. TPR, with its focus on integrating movement into language learning, offers a refreshing alternative to traditional, sedentary classroom environments. By encouraging students to physically engage with the material, TPR not only reinforces language acquisition but also promotes physical activity, helping to counterbalance the negative effects of prolonged screen exposure. This approach aligns with the broader educational goal of fostering holistic development, where cognitive and physical growth is intertwined. Reintroducing TPR in modern classrooms could provide a dual benefit: enhancing language learning while simultaneously addressing the need for more physical activity in students' daily routines.

The use of physical action in teaching is closely related to movement games, which are highly recommended in language instruction. As Paul^[1] states, "physically acting out knowledge to be learned or problems to be solved makes the conceptual metaphors employed by our brains a literal reality." Physical activities in teaching activate and stimulate learners' motor activity systems and cognitive skills, bringing together fun, critical thinking, and knowledge. This approach aids in explaining concepts through physical response activities, aligning with Jean Piaget's theory of constructing reality^[2].

Most movement games are associated with Asher's Total Physical Response (TPR) method. TPR, developed in the 1960s, was initially widely used in foreign language learning [3]. Its impact is well-documented in earlier research [4], and still used in specific areas of the world because of its easy use. By considering it as one of implicit teaching techniques that don't call for specialized equipment or tools, schools can use fewer resources, which support sustainable development on both an ecological and economic level. Generally, TPR is believed to be effective only in the early stages of second language (L2) acquisition. This research aims to evaluate how TPR can be applied to secondary school students and analyze its effectiveness in SLA, particularly in English as a

Foreign Language (EFL).

One movement game used in the EFL context is the "spell the word in action" game. Although it is not widely discussed in theoretical literature, it is commonly used to activate students' knowledge across multiple domains. In this game, students spell out each word through specific actions related to each letter, with the actions listed on a large banner in front of the class. This technique serves as a brainstorming activity at the beginning of each lesson, activating students' knowledge by introducing new words and physically engaging them through different actions. This physical activity can also serve as an entertainment factor, increasing student interest.

Learning new vocabulary effectively requires implicit methods that help learners acquire the language incidentally and subconsciously, without focusing on the learning process itself^[5]. Williams^[6] supports this idea, stating, "implicit learning occurs without intention to learn and without awareness of what has been learned." Krashen^[7] further emphasizes the importance of implicit teaching, noting that "language is subconsciously acquired while you are acquiring; you don't know you are acquiring; your conscious focus is on the message, not form." Therefore, teaching should focus on language acquisition rather than learning^[7]. This innovative approach to vocabulary learning can also enhance spelling, as Rippel^[8] notes that learners with good spelling skills use the most efficient spelling strategies in their daily tasks.

The use of "spell the word in action" technique highlights the need for language instruction that positions the language user as a partner in environmental discussions and as someone aware of environmental threats. Thus, when viewed holistically, foreign language education becomes a cornerstone of education for sustainable development.

Moreover, there is currently little research on the effectiveness of TPR in applied linguistics, particularly the use of "spell the word in action" movement game (see **Appendix A**), with only a few isolated studies analyzing its efficiency ^[9]. Given the method's near-obsolescence, this research seeks to revive it as an effective approach and evaluate its continued relevance in second language learning. To achieve these aims, the following research questions were formulated, and experimental research was conducted:

1. How does the "spell the word in action" technique affect

EFL students' spelling performance?

- 2. How does the "spell the word in action" technique affect EFL students' vocabulary acquisition?
- 3. How does the "spell the word in action" technique affect EFL students' vocabulary retention?
- 4. What are students' attitudes toward using the "spell the word in action" technique in learning English?

The last research question focuses on the participants' subjective satisfaction, which is crucial in assessing how positively they responded to this technique. High levels of satisfaction can significantly improve the classroom atmosphere, enhancing student participation and interest. Conversely, low satisfaction levels may indicate that students find the method frustrating, possibly due to shyness or negative peer pressure. Thus, evaluating both objective and subjective criteria is essential.

The added value of this research lies in its exploration of the applicability and effectiveness of the Total Physical Response (TPR) methodology in secondary school settings, specifically for English as a Foreign Language (EFL) instruction. While TPR has been traditionally associated with early stages of language learning and younger learners, this research extends its scope to older students, investigating how physical movement can enhance vocabulary acquisition, retention, and spelling performance at a more advanced level. By doing so, it challenges the conventional view that TPR is only effective in early language acquisition and aims to demonstrate its potential benefits across a broader age range and language proficiency levels.

The research gap addressed by this study is the limited examination of TPR's effectiveness in applied linguistics, particularly in secondary education contexts. While TPR has been widely studied and implemented in primary education, there is a noticeable lack of research on its application with older students, especially in the context of EFL. Moreover, the "spell the word in action" technique, despite its practical use in classrooms, has received minimal theoretical attention and empirical evaluation. This research seeks to fill this gap by providing empirical data on the effectiveness of TPR and movement-based learning strategies in secondary education, thereby contributing to the broader discourse on innovative and inclusive language teaching methodologies.

Literature Review

One of the main challenges English teachers face is maintaining learners' interest throughout lessons, Halliwell^[10] noted, that due to the diverse skills and sub-skills learners bring to the classroom, teachers must create a communicative environment that allows students to express themselves effectively. Incorporating various language games has proven to be an innovative and effective strategy for teaching English to younger learners. Wright, Betteridge, and Buckby^[11] observed that games create a classroom environment where learners interact before, during, and after the activity. Bransford, Brown, and Cocking [12] added that games can lighten the serious atmosphere of a lesson by introducing an emotional element. Liu et al. [13] found that most participating teachers believe that using games in the classroom serves multiple educational purposes and positively influences students' attitudes toward learning English. Additionally, games significantly impact EFL learners' willingness to communicate. However, implementing these games requires significant time and effort to achieve effective results, as well as an understanding of students' characteristics to select appropriate activities [14].

The basic principles of TPR were established by Professor James Asher, who conducted extensive research into L2 acquisition in the 1960s. In TPR, students physically respond to commands or instructions in the target language provided by the instructor. Once students understand the command, the instructor delays or refrains from providing a model, requiring students to perform independently. This physical response reinforces vocabulary retention, integrating physical activity into the learning process. TPR leverages cognitive processes involved in learning physical movements, which psycholinguistics suggests are more easily remembered by the human brain than verbal signals alone. When combined, these inputs can lead to improved vocabulary retention.

Recent studies, such as Xie^[3], have explored TPR's effectiveness, particularly with younger beginners, and identified challenges in its practical application. The findings suggest that TPR is a promising approach when combined with games, storytelling, role-play, and pair work involving physical actions. Another study by Dedić^[4] found that TPR

positively impacts learners, providing a conducive classroom environment, while the Natural Approach enhances students' satisfaction by allowing them to express their opinions and feelings freely.

Regarding vocabulary learning, it is crucial to note that foreign learners must expand their vocabulary to construct new sentences. Harmer^[15] stated, "If language structures make up the skeleton of language, then it is vocabulary that provides the vital organs and the flesh" (p. 246). Therefore, students should focus on expanding their vocabulary to facilitate communication. Aminudin^[16], mentioned that "the more vocabulary students learn, the more ideas they should have, allowing them to communicate their ideas more effectively." Hounhanou^[17] found that teaching English vocabulary through TPR helps students learn new vocabulary words more quickly and easily, supported by their surrounding environment. This study goes beyond merely practicing physical action in the classroom; it also examines the implicit effects of the "spell the word in action" game on students' spelling, vocabulary acquisition, and retention. The study's economic, environmental, and social factors can help teachers maximize available resources in schools to achieve the best teaching outcomes. Therefore, this study seeks to bridge a gap in applied linguistics research.

2. Materials and Methods

This study serves as a pilot case study, representing an initial exploration into the application of the Total Physical Response (TPR) methodology within a secondary school EFL context. As a pilot, this research aims to test and refine the experimental design, data collection methods, and evaluation tools before potentially scaling the study to a larger population or different educational settings. The choice of a single school and a small, controlled sample allows for a focused investigation into the feasibility of the TPR approach and its specific impacts on spelling, vocabulary acquisition, and retention among secondary school students. The insights gained from this pilot study are crucial for identifying any challenges or limitations in the methodology, such as the effectiveness of the reflection sheet or the students' engagement levels, which can be addressed in subsequent, more extensive studies.

Additionally, this pilot case study serves as a valuable

opportunity to assess the practicality of implementing TPR in a real classroom environment under pandemic-related constraints. The unique context of this research, including the small sample size and the specific focus on female students at a single school, provides a controlled setting for evaluating the potential benefits and challenges of TPR. The findings from this pilot study will contribute to refining the research instruments, such as the reflection sheet and the student questionnaire, ensuring they are robust and reliable for broader application. Moreover, the pilot study's results will help establish a foundational understanding of TPR's impact on secondary school students' language learning, offering preliminary data that can guide future research and pedagogical practices.

This experimental research was conducted at Al-Rafidian Secondary School in Iraq, a state secondary school comprising three grades: first, second, and third. The experiment took place during the 2020–2021 academic years. According to Brown and Rodgers [18], an experimental design is a strategy that the researcher uses to gather the data they need, control the variables or factors that could affect that data, and then conduct the appropriate analysis to test the research hypotheses within a well-thought-out plan. They also state that the investigator needs to select an appropriate experimental design that yields reliable findings regarding the correlations between independent and dependent variables and these guidelines were specifically applied by the present study.

2.1. Participants

The research sample consisted of twenty female students in the third grade, aged 14 to 15 years. The sample consists only of females because the school is for girls only and no other aim as set for that. The number of participants was relatively small due to pandemic-related restrictions, which limited the number of students allowed in the classroom. The researchers ensured that all participants had intermediate-level English competencies depending on their marks in the previous semester. The textbook used was *English for Iraq* by Terry O'Neill and Peter Snow (2016) English for Iraq^[19]. The experiment lasted for six weeks, with two 45-minute English lessons per week. No additional teaching tools were used that could impact the classroom environment. The vocabulary items presented were related

to the first three units of the textbook, with Unit One titled "At the Mall." For example, the words in the first lesson were: zebra, teacher, police, snake, run, fruit, sell, and store. The teacher instructed the students to associate each letter of these words with a physical action, such as "Z" as a zigzag, "T" as a twisting motion, and so on. In subsequent lessons, the students were expected to recall the new words, associating them with the corresponding physical actions. During the experiment, the instructor divided the students into groups of five to facilitate dealing with them and to give them a chance for more communication. The students were then instructed to form the letter shapes using their hands, and if more body parts were required, they could stand up and sit down as needed. If a student performed the action correctly, the teacher rewarded them with a compliment.

2.2. Data Collection

This research consisted of three parts. First, an experiment was conducted in which students applied a method for spelling new words through physical activity, guided by a large banner displaying all the English letters along with cor-

responding actions. This banner was prominently displayed throughout the experiment during all English classes.

The second part of the research involved assessing the students' performance using an evaluation tool. The students' performance was evaluated by the teacher using a reflection sheet designed to assess their progress over the course of the semester. Additionally, a subjective component of the research aimed to evaluate the students' satisfaction with the methodology applied. This reflection sheet, adapted from Al-Obaydi and Al-Mosawi^[20], allowed for a comprehensive evaluation, as students were assessed twice—once in the middle and once at the end of the experiment—to obtain comparable results (see Table 1). The advantage of using the reflection sheet was its ability to evaluate multiple variables simultaneously. The division of "poor", "good" and "very good" grading depend on the performance presented by each student. The teacher used the reflection sheet as an observation tool for each participant individually, with data collected and analyzed by the researchers to derive the findings. Throughout the experiment, the teacher recorded all relevant information during each class, and these reflection sheets were subsequently summarized and analyzed.

 Table 1. Daily reflection sheet.

Name				
Date				
The Title of the Lesson				
Spelling	Vocabulary Acquisition	Vocabulary Retention		
Total number of errors in spelling	Total number of the newly acquired words	Student's performance in the oral daily exam of vocabulary		
		Poor Good Very good		
Students' engagement in spelling	Total number of errors in guessing the new word	Student's performance in the final oral exam of vocabulary		
Poor Good Very good		Poor Good Very good		

The third instrument used in the research was a questionnaire designed to assess students' attitudes toward the applied methodology. It consisted of five questions with three possible responses on a scale ranging from "Yes," to "Partially Agree," to "No." The last two questions were openended. The questionnaire items were formulated based on relevant literature and the study's variables.

One of the primary limitations of this study is the small sample size, which consists of only twenty female students from a single secondary school. This limited sample may not fully represent the broader population of secondary school students, particularly across different regions, educational settings, or gender groups. As a result, the generalizability of the findings is constrained, and the outcomes observed in this study may not be applicable to other contexts or student demographics. Additionally, the research was conducted during the 2020–2021 academic year, a period marked by pandemic-related restrictions. These restrictions not only limited the number of participants but also may have influenced the students' engagement and the overall classroom dynamics, potentially affecting the study's results.

Another limitation is the exclusive focus on female students in a single-gender school, which precludes the possibility of comparing the effects of the TPR methodology across different genders. Furthermore, the study's reliance on a specific textbook and vocabulary set means that the

findings may be contextually bound to the content of English for Iraq and may not necessarily extend to other curricula or language learning materials. Lastly, the pilot nature of this study, while beneficial for refining the methodology, also means that the findings are preliminary and should be interpreted with caution until further research with larger and more diverse samples is conducted.

3. Results

The findings of this pilot study indicate that incorporating physical activity into a foreign language class can significantly enhance student motivation and engagement. Although the research sample was small, there were notable improvements in specific areas such as spelling, vocabulary acquisition, and retention. The implementation of total physical response (TPR) in this experiment proved to be both effective and efficient, as detailed below. Specific Results Related to the Research Questions is as follows:

3.1. Results for the First Question: How Much Will the Technique Affect EFL Students' Performance in Spelling?

Data from the reflection sheets revealed that during the first three weeks of the experiment, each participant made between 2 to 6 spelling errors. In the following three weeks, the students' spelling accuracy improved markedly, as they became more focused and accustomed to the game. As a result, the average number of errors decreased to between 1 and 3 per participant.

Additionally, the reflection sheets assessed students' engagement in spelling activities, both chorally and individually. The results showed a gradual improvement in engagement as described in **Figure 1**. In the first three weeks, the ratings were evenly split between "good" and "very good." By the second three-week period, the number of "very good" ratings increased, resulting in 16 "very good" and 4 "good" ratings, with no "poor" ratings.

Despite the small sample size, the progress was evident, with students showing marked improvement in their results. This could be attributed to the fact that students perceived the activity as a game rather than a learning exercise, which increased their motivation and subjective engagement. Over time, students became more comfortable and interested in the activity, eagerly participating, which in turn motivated previously inactive classmates who had been shy or initially uninterested.

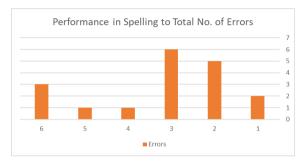


Figure 1. The Performance in spelling the total number of errors.

3.2. Results for the Second Question: How Much Will the Technique Affect EFL Students' Vocabulary Acquisition?

The vocabulary introduced during the activity was aligned with the theme of each unit in the students' English textbook. In each lesson, the teacher selected ten key words deemed most important for students to learn through the activity. Occasionally, certain words were repeated in subsequent lessons if the teacher felt additional emphasis and revision were needed to ensure retention.

The process of introducing new vocabulary began with the words being presented through actions. Next, the participants spelled the word aloud individually, followed by the class repeating the word after the teacher. Finally, the participant wrote the word on the board for the entire class to see. These multiple steps enriched the vocabulary acquisition process, making it more effective than a single activity, such as merely writing the word in a notebook as shown in **Tables 2** and **3**, and **Figure 2**.

Table 2. Performance in vocabulary acquisition among weeks and weeks/newly acquired words/guessing new words.

Categories	Minimum Error in Guessing the New Words	Maximum Error in Guessing the New Words	Minimum Newly Acquired Words	Maximum Newly Acquired Words
Weeks 1–3	3	6	35	45
Weeks 4–6	1	2	45	55

Table 3. Performance in vocabulary acquisition among weeks and weeks/newly acquired words/guessing new words.

Categories	Weeks 1–3	Weeks 4–6	
Minimum error in guessing the new words	3	1	
Maximum error in guessing the new words	6	2	
Minimum newly acquired words	35	45	
Maximum newly acquired words	45	55	

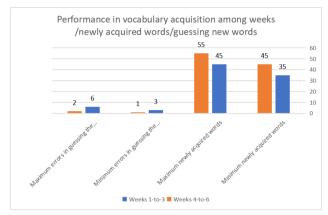


Figure 2. Diagram of performance in vocabulary acquisition among weeks/newly acquired words/guessing new words.

3.3. Results for the Third Question: How Much Will the Technique Affect EFL Students' Vocabulary Retention?

Vocabulary retention analysis was conducted by the researchers to determine the extent to which students memorized the newly acquired words, specifically through the movement-based game. Two oral tests were used for this purpose. The first test was a daily oral quiz, where the teacher asked each student individually about the words covered in previous lessons and recorded the results. The second test was administered at the end of every three weeks during the experiment.

Students were rated on a three-point scale—good, very good, and poor—based on the teacher's evaluation as shown in **Figure 3**. While the evaluation was subjective, the teacher is an experienced educator, capable of assessing students accurately, thereby minimizing subjective bias even in the absence of a committee of evaluators. The results indicated high levels of retention in both tests, as shown in **Figure 3**. The repetition of actions and spelling produced excellent results in retaining new vocabulary. Therefore, this movement-based game can be considered an effective practice for enhancing both short-term and long-term memory.

3.4. Results for the Fourth Question: What Are the Attitudes of the Students toward Using the Technique in Learning the English Language?

The subjective opinions of the participants are crucial, as the introduction of a game in an EFL class should promote enjoyment and engagement rather than stress or fear. Therefore, evaluating whether the students felt satisfied, frustrated, or bored with this activity is essential to assess its effectiveness. If the levels of subjective satisfaction are high, it suggests that the students enjoyed the activity, found it motivating, and looked forward to it, as well as their English class.

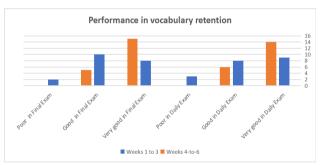


Figure 3. Performance in vocabulary retention.

Overall, the participants' satisfaction levels were very high. The vast majority assessed the process and implementation of this action game as beneficial and efficient in all three aspects: learning new words, spelling, and retention. While the participants may not have the expertise to evaluate the benefits systematically and objectively, their positive responses suggest they were satisfied with and enjoyed the methodology. The fact that they felt the game could improve their vocabulary acquisition, retention, and spelling is highly encouraging, even though it was a subjective evaluation. Their positive feelings toward the game likely contributed to enhanced motivation and engagement.

3.5. Results for the Fifth Question: Do You Prefer Using Action and Movement Games in Teaching or Other Kinds of Methods? Why?

The answers to the last two questions revealed that most students (18 out of 20) responded "yes" to the sixth question, "Do you prefer using action and movement games in teaching, or other kinds of methods? Why?" Their justifications varied, with the most common responses being:

- 1. "I like playing in class."
- 2. "I like playing and making movements with my friends."
- 3. "I like games."
- 4. "This makes me happy and overcomes my shyness."
- 5. "I become eager for the English lesson."

The most frequent suggestions from the students included:

- 1. "I wish to use physical activities in all other subjects."
- "I suggest making this activity a part of our lessons' routines."
- 3. "We no longer like traditional ways of teaching. Please change them."
- 4. "Ask my teacher to use different action games."

4. Discussion

As mentioned earlier, Total Physical Response (TPR) is often not considered a modern tool and has been largely abandoned by many current textbooks. EFL/ESL teachers do not frequently use it compared to several decades ago when this methodology was popular and widely applied. However, our findings clearly demonstrate that students are generally very satisfied with this technique, as it introduces entertainment and physical activity into the classroom, which young learners often perceive as fun. This supports the general findings of previous research that TPR is an effective motivational and engaging tool for language acquisition, and that students typically appreciate additional activities beyond sitting in front of a teacher or a book. These results align with those of Xie^[3], Dedić^[4], and Al Harrasi^[21].

The goal of this research was to revisit TPR methodology and assess whether it still holds value in foreign language learning, despite being described and evaluated half a century ago, long before the advent of the Internet and social

media, which now dominate as supportive tools in L2 acquisition for both students and teachers. Our research indicates that TPR can still play a role in certain levels of L2 acquisition, particularly in secondary school settings. Students are generally enthusiastic about engaging in activities beyond what traditional textbooks offer. Given the scarcity of recent research on TPR, our study aimed to reinvigorate interest in this method and has shown that even in an era dominated by global Internet communication and digital media, this simple tool can bring fresh energy to foreign language classes. Although TPR may seem outdated in the context of modern technology, the fact that students spend much of their free time in front of screens suggests that any activity that reduces screen time is likely to be welcomed. If that activity is also physical, it is even more beneficial.

The results show that secondary school student skills in spelling, vocabulary acquisition, and vocabulary retention improved significantly when they used TPR. Our findings do not claim that TPR is superior to other techniques and methodologies, as teachers understand the importance of combining various approaches to cater to the diverse personalities of students. However, our findings do suggest that TPR can be a valuable tool in L2 acquisition, particularly for younger students. The positive changes in performance between the two parts of the evaluation indicate that gradual enhancement occurred, possibly due to the repetition of the game in each lesson and the enjoyment students felt when participating.

The results also demonstrate that the study participants held very positive attitudes toward this game, which was somewhat surprising. One might assume that this activity would not be sufficiently engaging, given the abundance of stimuli available to students. However, this finding aligns with the results of Dedić^[4] and Tawafak, Alfarsi, & Jabbar^[22]. We can conclude that the students exhibited high levels of engagement, enthusiasm, entertainment, and class interaction, which is a strong endorsement of the TPR methodology. Even though the activity was used at the beginning of each lesson, the students' positive mood persisted throughout the class. Although the activity lasted only ten minutes, it created a productive learning environment and made students look forward to each lesson, as they expressed in their feedback. The role of teachers is crucial in this process, as they can foster a positive class environment and promote

emotional intelligence among students^[5].

Another important aspect highlighted by this study is the use of implicit teaching methods to enhance students' vocabulary acquisition. This approach needs serious consideration by educational institutions as a viable solution to many challenges, particularly in EFL contexts [23]. The natural way of learning vocabulary, as opposed to traditional textbook methods, provided by this game can strike a balance between learning and entertainment, which is both effective and productive. The results of this study are consistent with Hounhanou^[19], who recommends using physical action for learning vocabulary, and with Al-Obaydi [24], who noted that implicit learning techniques do "not overload schools and at the same time increase learners' motivation and engagement." Our research findings also align with those of Doncheva [25]. Derakhshan & Shakki [26], and Liu [27], who observed positive outcomes after using various implicit techniques in teaching. The ideas of Pishghadam et al. [28] further support different kinds of activities and relationships that enhance students' willingness to attend class.

5. Conclusions

This study highlights several benefits of using movement games, particularly in enhancing student engagement. The lessons became more memorable and engaging, students' concentration increased, and classroom behavior improved as the activity involved each student individually. It also fostered an inclusive learning environment where all students could participate, whether in presenting or guessing, and helped create a positive classroom atmosphere full of fun and learning. This, in turn, increased students' willingness to actively attend lessons. The results of this study align with those of Fiore [29], who demonstrated that incorporating physical activities into a class environment improved students' memory skills and created a favourable learning atmosphere, ultimately motivating students to actively attend and enjoy their English classes. Additionally, critical pedagogy aspects could be developed through such activities [30].

However, there are several limitations to this research. Primarily, the study was conducted on a relatively small sample of students, so larger-scale research would be beneficial to verify the findings and provide more statistically accurate results. A broader geographical area would also be necessary

to obtain globally comparable data from various countries, though we believe geographical discrepancies would not significantly affect the results. Despite these limitations, the preliminary findings of this pilot study could serve as an impetus for further research into the implementation of TPR methodology in L2 acquisition. It is important to note that teachers should balance the number of words, the type of game, the time allotted, and the level of effort required to ensure effectiveness. Moreover, additional research is needed to explore the implementation of TPR methodology in foreign language learning at higher levels, such as intermediate and advanced. There is currently a lack of research in this area, possibly due to the assumption that TPR is only suitable for lower levels of language competence, but this assumption needs to be verified. Further psycholinguistic research should focus on the mechanisms responsible for the improvement of vocabulary acquisition and retention when using TPR. Advances in neuroscience and cognitive science have provided new approaches to understanding memory, and these topics should be investigated in the context of TPR.

Author Contributions

Conceptualization, L.H.A.-O.; methodology, L.H.A.-O. and M.P.; investigation, L.H.A.-O.; resources, L.H.A.-O.; writing—original draft preparation, L.H.A.-O. and M.P.; writing, review and editing, L.H.A.-O. and M.P.; funding acquisition, M.P. All authors have read and agreed to the published version of the manuscript.

Funding

This research was part of the SPEV 2025 Project run at the Faculty of Informatics and Management at the University of Hradec Kralove, Czech Republic. The APC was funded by the SPEV 2025 Project.

Institutional Review Board Statement

The research was approved by the Ethics Committee of the University of Hradec Kralove.

Informed Consent Statement

Not applicable.

Data Availability Statement

All data are present directly in the manuscript.

Acknowledgments

This research is part of the SPEV 2025 project run at the Faculty of Informatics and Management of the University of Hradec Kralove.

Conflicts of Interest

The authors declare no conflict of interest.

Appendix A

A 100 high knees		
B 20 crunches		
C 30 jump squats		
D 15 push ups		
E 1-minute squat hold •		
F 10 burpies		
G 10-20 metre sprint		
H 20 squat jumps		
I 30 jumping lunges		
J 15 crunches		
K 10 push ups		
L 2-minute squat hold		
M 20 burpies		
N 25 burpies		
O 40 jumping lunges		
P 10-15 metre sprint		
Q 30 crunches		
R 15 push ups		
S 30 burpies		
T 15 jump squats		
U 10-30 metre sprint		
V 3-minute squat hold		
W 20 burpies		
X 60 jumping lunges		
Y 10 crunches		
Z 20 push ups		

Figure A1. Spell the Word in Action Game.

References

- [1] Paul, A.M., 2014. Let's Move! How Body Movements Drive Learning Through Technology. KQED News. Available from: https://ww2.kqed.org/mindshift/2014/07/11/lets-move-how-body-movementsdrive-learning-through-technology/(cited 26 June 2017).
- [2] Piaget, J., Inhelder, B., 1997. A psicologia da criança, 3rd ed. ASA Editores: Lisboa, Portugal. p. 143.
- [3] Xie, R., 2021. The Effectiveness of Total Physical Response (TPR) on Teaching English to Young Learners. Journal of Language Teaching and Research. 12(2), 293–303. DOI: http://dx.doi.org/10.17507/jltr.1202.11.
- [4] Dedić, K., 2021. Attitudes toward Total Physical Response and the Natural approach. International Journal of Multidisciplinary and Current Educational Research. 3(6), 115–122. DOI: https://doi.org/10.58557/ijeh.v1i 3.23
- [5] Al-Obaydi, L.H., Pikhart, M., Derakhshan, A., 2022. A Qualitative Exploration of Emotional Intelligence in English as Foreign Language Learning and Teaching: Evidence from Iraq and the Czech Republic. Applied Research on English Language. 11(2), 93–124. DOI: https://doi.org/10.22108/ARE.2022.132551.1850.
- [6] Williams, J.N., 2005. Learning without awareness. Studies in Second Language Acquisition. 27(2), 269–304. DOI: https://doi.org/10.1017/ S0272263105050138
- [7] Krashen, S., 1989. We acquire vocabulary and spelling by reading: Additional evidence for the input hypothesis. The Modern Language Journal. 73(4), 440–464. DOI: https://doi.org/10.2307/326879
- [8] Rippel, M., 2009. All About Spelling series. The Old Schoolhouse® Magazine, LLC. Available from: http://creation.com/effective-spelling-strategies (cited 23 January 2014).
- [9] Oflaz, A., 2019. The Foreign Language Anxiety in Learning German and the Effects of Total Physical Response Method on Students' Speaking Skill. Journal of Language and Linguistic Studies. 15(1), 70–82. DOI: https://doi.org/10.17263/jlls.547616
- [10] Halliwell, S., 1992. Teaching English in the Primary Classroom. Longman: New York, NY, USA. p. 169.
- [11] Wright, A., Betteridge, D., Buckby, M., 2005. Games for Language Learning, 3rd ed. Cambridge University Press: New York, NY, USA. p. 193.
- [12] Bransford, J.D., Brown, A.L., Cocking, R.R. (Eds.), 2000. How people learn: Brain, mind, experience, and school. Commission on Behavioral and Social Sciences and Education. National Academies of Sciences, Engineering, and Medicine: Washington, DC, USA. p. 374.
- [13] Liu, F., Vadivel, B., Rezvani, E., et al., 2021. Using

- games to promote English as a foreign language learners' willingness to communicate: potential effects and teachers' attitude in focus. Frontiers in Psychology. 12, 762447. DOI: https://doi.org/10.3389/fpsyg.2021. 762447
- [14] Brown, H.D., 2001. Teaching by Principle: An Interactive Approach to Language Pedagogy. Longman: New York, NY, USA. p. 480.
- [15] Harmer, J., 2001. The practice of English language teaching. Pearson Longman: Essex, UK. p. 370.
- [16] Teaching Vocabulary Through TPR Method to Children. Available from: http://aminudin241072.wordpress.com/2009/02/08/teaching-vocabulary-through-tpr-method-to-children/ (cited 28 February 2010).
- [17] Hounhanou, A.J.V., 2020. Promoting TPR (Total Physical Response) Method in Teaching Vocabulary for EFL Beginners in Benin Secondary Schools. International Journal of Applied Linguistics & English Literature. 9(6), 23–31. DOI: https://doi.org/10.7575/aiac.ijalel.v. 9n.6p.23
- [18] Brown, J.D., Rodgers, T.S., 2002. Doing Second Language Research. Oxford University Press: Oxford, UK.
- [19] O'Neill, T., Snow, P., 2016. English For Iraq 3st Intermediate Student's Book. Republic of Iraq Ministry of Education. Garnet Education: Reading, UK.
- [20] Al-Obadyi, L.H., Al-Mosawi, F.R., 2018. Dictogloss as a technique to Raise EFL college students' Knowledge of Grammar, writing and the comprehension of Meaning. International Journal of English Linguistics. 9(1), 293–300. DOI: https://doi.org/10.5539/ijel.v9n1p293
- [21] Al Harrasi, K.T.S., 2014. Using "total physical response" with young learners in Oman. Childhood Education. 90(1), 36–42. DOI: https://doi.org/10.1080/00094056.2014.872513
- [22] Tawafak, R.M., Alfarsi, G., Jabbar, J., 2021. Innovative Smart Phone Learning System for Graphical Systems within COVID-19 Pandemic. Contemporary Educational Technology. 13(3), ep306. DOI: https:

- //doi.org/10.30935/cedtech/10879.
- [23] Enayat, M.J., Derakhshan, A., 2021. Vocabulary size and depth as predictors of second language speaking ability. System. 99(102521). DOI: https://doi.org/10.1016/j.system.2021.102521
- [24] Al-Obaydi, L.H., 2020. Towards Implicit Vocabulary Acquisition of Young Learners: The Use of Input Flooding and Peripheral Learning. The Journal of Asia TEFL. 17(3), 11021110. DOI: https://doi.org/10.18823/asiate fl.2020.17.3.27.1102
- [25] Doncheva, J., 2016. Formation of ethical rules (code) in preschoolers through the Bulgarian children's folklore games. Proceedings of the International Scientific Conference; University "Goce Delcev", Stip, Republic of Macedonia; 24–25 September 2015. pp. 32–35.
- [26] Derakhshan, A., Shakki, F., 2019. The effect of incidental and intentional instruction of English collocations on Iranian advanced EFL learners' comprehension. Language Related Research, 10(2), 25–51.
- [27] Liu, J., 2011. The effects of glossing on incidental vocabulary learning through reading-based oral tasks. The Journal of Asia TEFL. 8(3), 221–241.
- [28] Pishghadam, R., Derakhshan, A., Zhaleh, K., et al., 2021. Students' willingness to attend EFL classes with respect to teachers' credibility, stroke, and success: a cross-cultural study of Iranian and Iraqi students' perceptions. Current Psychology. 40, 1–15. DOI: https://doi.org/10.1007/s12144-021-01738-z
- [29] Fiore, N., 2014. The Benefits of Movements in School. The Creativity Post. Available from: http://www.creativitypost.com/education/the_benefit s_of_movement_in_schools?platform=hootsuite (cited 20 June 2024).
- [30] Pikhart, M., Al-Obaydi, L.H., Tawafak, R., 2022. The Implementation of Critical Pedagogy in Digital Second Language Acquisition in Higher Education: Age and Gender Differences. Computer-Assisted Language Learning Electronic Journal (CALL-EJ). 23(2), 56–75.